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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,337	01/30/2004	Dana Aylor	066448-0014	8260

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EXAMINER

LAZORCIK, JASON L

ART UNIT	PAPER NUMBER
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1731

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,337	AYLOR, DANA	
	Examiner	Art Unit	
	Jason L. Lazorcik	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Group II: Claims 6-11 drawn to a method of production of decorative blown glass in the reply filed on April 3, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The instant claim wherein Applicant claims that the "decorative blown glass is beverage glass" appears to recite a statement of intended use for the product produced by the elected method claims. As such, the instant claim does not further limit the parent claim drawn to the method of manufacturing the glass.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "The decorative blown glass" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 likewise recites the term "its" in line 11 without providing a clear and unambiguous antecedent for said term. Specifically, it is unclear if Applicant intends to limit the surface viscosity of "the decorative glass body or slice of millefiori glass", the "hot glass bottle made of basic transparent glass", or both.

Claim 6 recites the limitation "The blank of the glass bottle" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the basic glass" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "The basic transparent glass" in line 17. There is insufficient antecedent basis for this limitation in the claim.

In light of the aforementioned rejections under 35 U.S.C. 112, second paragraph, Applicant is requested to carefully review the chosen claim construction for consistency and clarity. Although not required, Applicant is requested to replace the term "its" currently utilized in claim 6, lines 10, 11, 14, and 18 to more clearly delineate the metes and bounds of his/her proposed invention.

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As mentioned above, Applicant is also requested to review and amend the claims for consistency of terminology. For example, as currently presented, it is unclear what if any distinction Applicant intends between claimed elements of “the blank of the glass bottle”, “the basic glass”, and “the basic transparent glass”.

Claim Rejections - 35 USC § 102

Claims 6-9 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Newman (An Illustrated Dictionary of Glass, Thames & Hudson; New Ed edition (May 1987), pp160).

Newman teaches a method of producing decorative blown glass or “beverage glass” commonly known as “intarsia glass” developed during the 1920's to 1930's. The technique is distinguished by having a layer of coloured glass cased between two layers of clear glass wherein the total thickness of said decorative glass is typically less than 3mm [**Claim 8**]. The reference teaches that arranging fragments of coloured glass which are held functionally equivalent to the claimed millefiori glass. These colored glass fragments are adhered to the exterior of a parison of clear molten glass. The chips are coated in another layer of clear glass, the laminate heated and blown to reduce the thickness of the vessel and to lighten the color.

Although the reference does not explicitly limit the surface viscosity of the bottle or parison of “basic transparent glass” to fall within a range of about 10^4 to 10^9 Pas, it is the Examiners position that such a viscosity range is either implicitly disclosed in the reference or alternately would have been readily obvious to one having an ordinary level

of skill in the art at the time of the invention. Specifically, of ordinary skill in the art would clearly recognize applicants claimed viscosity range as the “normal” or typical viscosity for deforming a heated glass into final form. This viscosity range is typically referred to as the “working range for glass (see below technical definition);

“Working Range: The range of surface temperature in which glass is formed into ware in a specific process. The “upper end” refers to the temperature at which the glass is ready for working generally corresponding to a viscosity of 10^3 to 10^4 poises. The “lower end” refers to the temperature at which it is sufficiently viscous to hold its formed shape, generally corresponding to a viscosity greater than 10^6 poises. For comparative purposes and when no specific process is considered, the working range of glass is assumed to correspond to a viscosity range from 10^4 to $10^{7.6}$ poises.”

(http://www.corning.com/Lifesciences/technical_information/techDocs/glass_terminology.asp)

In addition, although the instant reference is silent regarding the degree of “enlargement” experienced by the vessel during the blowing process, it is the Examiners position that the claimed step of enlarging “at least two times” and/or the piece being enlarged “at least five to thirty times” [Claim 7] is either implicitly encompassed in the disclosed process, or alternatively that it would have been readily evident to one having an ordinary level of skill in the art. Specifically with

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respect to the latter and absent any compelling and unexpected results to the contrary, it would have been obvious for one having an ordinary level of skill in the art at the time of the invention to expand the glass to any reasonable degree as requisite to fulfill an end user application.

Claims 6, 7, 8, and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gardner ("The Glass of Frederick Carder", Crown Publishers, New York, 73-75, & 77-79).

As in the previous reference to Newman, Gardner teaches a style of glass manufacture practiced by an artist named Frederick Carder in the late 1920's to early 1930's and commonly referred to as Intarsia. This reference teaches that fragments of colored glass are arranged on a marver, adhered to a heated parison of clear, colorless glass, and worked by traditional blowing techniques into final form. A discussion of Millefiori glass in the same reference teaches that ancient artistic glassware "were made from pieces of colored glass and millefiori cane segments fused together by mosaic techniques in much the same manner as Carder used" (pg 78)

The reference continues by indicating that the pieces typically ranged from 1/16 to 1/8 inch thick [**Claim 8**] in "three layers of glass: two colorless crystal glass layers encasing a layer of colored glass which forms the ornamental design" (page 74) [**Claim 10**]. An excerpt illustration (illustration 115, pg 74) from the instant reference is presented below along with Applicants Figure 1 to underscore structural and design similarities between the product produced by Applicants process and that of prior art.

The figure further illustrates that the "proportionality" of the colored glass design is roughly maintained through the glass blowing and working process as claimed.

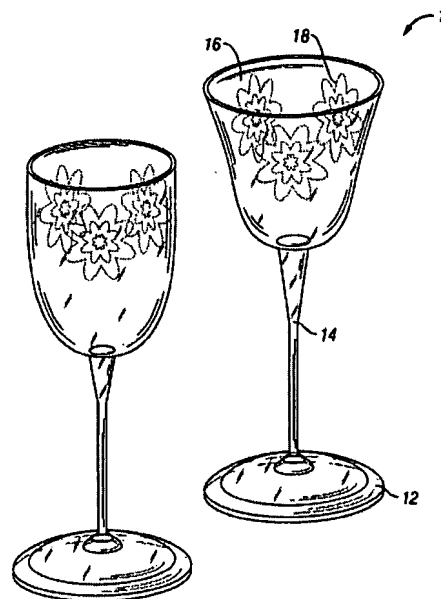


FIG. 1

The Gardner reference continues by teaching that "an elongated parison of crystal glass varying with size of the piece desired, but averaging about 3 inches long by 1½ inches in diameter" was used to produce a 6- to 8- inch glass vessel. This disclosure therefore teaches that the vessel is expanded "at least two times" as claimed.

Again, the Gardner reference does not explicitly limit the surface viscosity of the parison or the decorative glass chips to fall within a range of about 10^4 to 10^9 Pa-s.

Under the same rationale presented above, it is the Examiners express position that such a viscosity range is either implicitly disclosed in the reference or alternately would

have been readily obvious to one having an ordinary level of skill in the art at the time of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner as applied to claim 6 above. Gardner does not explicitly teach that the design is enlarged "at least five to thirty times". Gardner does however explicitly teach an expansion ratio of at least two times in addition to disclosing that "the more the piece was blown out, or worked, the thinner the layers become and the lighter the color of the design" (page 74). Although the reference is silent regarding the particular claimed expansion ratio, one having no more than an ordinary level of skill in the art at the time of the invention would have arrived at the claimed expansion through routine

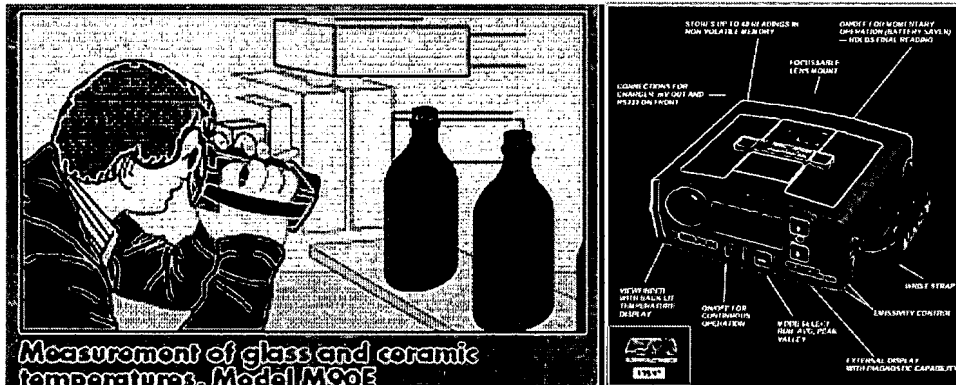
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experimentation. One would have been motivated to produce the claimed expansion ratio during the glass blowing process in the course of achieving a blown glass article of desired thinness and/or having a design of a desired "lightness".

Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Either Newman or Gardner as applied to claim 6 above, and further in view of the Mikron M90 Infrared Thermometer data sheet

(<http://www.mikroninfrared.com/products/portable/m90.htm>). Neither prior art reference discussed above explicitly instructs the use of an infrared thermometer operating in a wavelength range of 5 microns or greater to monitor the viscosity of the glass workpiece. It is well appreciated in the glass manufacturing arts that glass viscosity is directly correlated with the glass temperature, and it is likewise a well appreciated goal to maintain said workpiece at a temperature which maintains a viscosity in the "working range" when shaping a glass article.

The cited non-contact infrared thermometer manufactured by Mikron teaches monitoring the Spectral response in the range of 4.8 to 5.2 microns to achieve a surface temperature reading. The data sheet further explicitly teaches scenarios using this spectral range for monitoring "glass and ceramic surfaces such as tempering annealing, sealing, bending and laminating."



Therefore, it would have been obvious to one having an ordinary level of skill in the art at the time of the invention to monitor the glass surface temperature with a Mikron M90 series non-contact IR thermometer in the wavelength range of 5 microns or greater when shaping the glass workpiece. This would have been an obvious route for one of ordinary skill seeking to maintain the workpiece within the working range viscosity.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571) 272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLL


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